

Developing monitoring strategies for land managers and the public at large
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The ultimate goal of any biological control project is success in a field setting. Years or decades of study and development have preceded the moment of field release. However, field releases are usually performed on property that is controlled partially or entirely by other individuals or agencies. The success rate of a project and also future projects, can be increased by establishing a high level of communication with land managers and land owners, sometimes involving them in various monitoring phases of the project.

Effective land managers, whether they are co-employees with researchers, private or public co-operators, or contracted individuals, are primarily concerned with effective management of their own land charge. Projects that coincide with their individual management goals are likely to elicit their strongest supportive effort. Biological control, because it is relatively new, based in natural systems and focused on invasive pests is a strong fit with most land managers. Involving them early in project development makes them stakeholders with an investment in the projects success. Requesting their assistance in monitoring is often unanticipated but will ensure their support through the projects conclusion.

Involving land managers in monitoring has several advantages; an involved land manager is a committed manager who will assist in protection of sites for the duration of a project; a satisfactory project eases the establishment of follow-up or future projects; researchers seldom have the resources to satisfactorily complete and monitor a field project so working with land managers can increase available man hours; on-site land managers often bring new insights about local ecosystems; and land managers are often a more timely on-site presence to observe effects. In the event that a project results are disappointing, having land managers involved makes them more understanding of unanticipated failures.

Involving land managers in monitoring may require designing protocols tailored to the specific availability and/or skill sets of the individual. Although these protocols may be substantially different from that employed by researchers in limited but intensive trials, protocols can still be designed to collect data that is biologically relevant and publishable. Observational data, sample collection and non target monitoring are aspects that can be designed to match land managers skills and also produce results that match the reporting needs of the cooperating land managers.

The participation of individual land managers depends greatly on their backgrounds, job description, and employer relationships. For example, resource conservation districts and other semi-governmental agencies such as regional parks often will commit well educated, highly motivated individuals that can devote substantial time to detailed monitoring efforts. Unfortunately, these programs often depend upon short term grants that change rapidly so the involvement is intense, but often is a short term. These groups also generally desire a more rapid quantifiable result than other land managers which complicates monitoring.

Managers of large tracts of Federal lands, and their staff, have little time to devote to intense monitoring efforts. Additionally, they usually have little incentive to divert resources from traditional to unproven methods. In order to take advantage of assistance from federal land managers, appeals to specific mutual goals is advantageous. For example, evaluating biological control over exotic pests within endangered species habitat can be highly supported with both resources and effort. Federal properties often have the longest term commitment to field biological control projects, but the effort suffers with staff and management transfers.

Private landowners represent the most varied group to work with and also the most varied level of commitment. Total indifference or simple acceptance is as likely as obsessive involvement. Extreme clarity in monitoring protocols is essential on private lands since there is such a variation in background. Private land managers are the least likely to help with detailed monitoring efforts. Private land owners and those managing private lands expressed the greatest concern about non target effects.

Enlisting assistance from land managers is greatly focused by addressing the “what is in it for me?” question. Ideally, the protocol and goals will establish an answer to this without the question needing to be formulated. A strong motivating appeal that has worked involves emphasizing the cost savings to all that quality monitoring early may save funds in the future and/or clearly focus new introductions.

Working with land manager to establish and monitor field releases is not without problems. In spite of obtaining pre-release commitment to assist with monitoring, such assistance often fails to materialize. Field site security is not always assured. It is not unrealistic to anticipate site destruction approaching 10%. Finally, drastic inconsistencies in the quality of field monitoring can occur unless clear communication exists including the written protocol.

Land managers have a certain degree of expectations of the researcher as a result of their cooperation. The implicit expectation is preparation, primarily in the form of a clear decisive written protocol. It is also essential to be timely, and dependable in scheduling and reporting to the landowner. Providing direct feedback about results and publicly respecting the cooperation is essential.

Because researchers are usually distant from field sites, a local intermediary is often invaluable in establishing and maintaining communication with land managers. These local individuals must be equally responsive and dependable to landowner and researcher.